

EXS-22-74

1 August 1974:

MEMORANDUM TO: Mr. Sol Polansky, Deputy Director
Office of Soviet Union Affairs
Department of State

Water Reservoir

25X1A

Date Impossible to determine

31 July 1974

CH/200
 LBS-
 MIS-
 GSS-
 PCS-
 FIC
 WATON
 LANCET
 HODG
 HODG
 SSI
 Apollo 11

25X1A

MEMORANDUM FOR:

[Redacted]

-Interagency Advisory Group

SUBJECT:

Coordinated Review on Draft Quarterly
 Report on Implementation of US-USSR
 Bilateral Agreements for the Second
 Quarter of 1974

1. Set forth below are comments prepared jointly by OSI and OER on the draft ninth Quarterly Status Report on the implementation of the US-USSR Bilateral Agreements.

2. While giving a reasonably accurate and balanced account of the Working Group activities during this quarter, the report lacks certain substantive details and comments that would present a more definitive assessment of the progress of the bilateral program. For example, on Page 15 the statement is made that the Soviets prepared a special report on their traffic enforcement system at the request of DOT but no further information is given on the scope and quality of this report. Such information would indicate how forthcoming the Soviets are being in this exchange. On Page 23 the section describing the Soviet presentation at the IRI June meeting is another instance where a comment should have been added on the quality and substance of the Soviet offerings.

3. With regard to the Stanford Research Institute June meeting in Moscow (page 23), presumably information on the outcome of this meeting should be available to State by now and, if so, some assessment of that meeting should be included. Again, in the section on Atomic Energy (page 25) further elucidation on the US CTR program leaders' assessment would be useful.

25X1A

CLASSIFIED BY 169804
 EXEMPT FROM GENERAL DECLASSIFICATION
 SCHEDULE OF E. O. 11652, EXEMPTION CATEGORY:
 § 5X(1), (2), (3) or (4) (circle one or more)
 AUTOMATICALLY DECLASSIFIED ON
 [Redacted]
 (unless impossible, insert date or event)

WARNING NOTICE
 SENSITIVE INTELLIGENCE SOURCES
 AND METHODS INVOLVED

SECRET

SUBJECT: Coordinated Review on Draft Quarterly
Report on Implementation of US-USSR
Bilateral Agreements for the Second
Quarter of 1974

4. In the section describing the Article 4 activities on Page 23 no mention is made of the recent cancellation of the Boeing and Lockheed protocols. Although these events post-date the period covered in the Quarterly Report, we believe they are of sufficient importance to warrant being noted in this report since these events represent a significant departure from all preceding Article 4 activity. Also with regard to the Article 4 Section, according to available information (MOSCOW 8883, dated 11 June 1974) Burroughs has signed a protocol with the SCST rather than a technical cooperation agreement. Accordingly the last sentence of this paragraph should be changed to read "...signed technical cooperation agreements and/or protocols with the SCST..."

5. With regard to the section on Water Resources (page 21) we note that according to MOSCOW 7726, dated 23 May 1974, the Embassy had received a letter from the Soviet Working Group indicating the Soviet side planned to transfer the Cold Weather Construction Techniques project from the Water Resources Group to the Energy Working Group. We have seen no further correspondence explaining the US position on this or the final outcome of the Soviet plan, however.

6. Our comments on the Apollo-Soyuz Test Project made on the 8th Quarterly Report (see Attachment) also apply to the presentation in the Space Section on Pages 16-18 of this report. In addition, information on activities during the 9th Quarter indicates the flow of data on hardware is even more one way than before. Also it appears the US team will not get to examine the Soviet spacecraft until it is on the pad and that the US crew will have more responsibility regarding spacecraft control during docking.

25X1A

Chief
Sciences and Science Policy Branch

Attachment: a/s

~~SECRET~~

Attachment

2. With respect to the space agreement, we feel that the reporting on the Apollo-Soyuz Test Project seriously underplays the inequitable flow of data, know-how, and hardware which heavily favors the Soviets. In general, the ASTP program is providing the USSR with considerable benefits in a number of technological areas with promise of little tangible return to the US. The gains to the US center around interest to developing an international space rescue capability and the preservation of the Apollo ground and space teams until the US Shuttle program is initiated. Overall, ASTP will serve to enhance an undeserved Soviet image of technological parity with the US in manned space flight. With respect to specific technological gains to the Soviets, they are being exposed extensively to many of the superior management techniques

used by NASA with emphasis on pre-mission checking and documentation, flight, and contingency planning. In the area of spacecraft control, Apollo transponders and related equipment are to be installed in the Soyuz spacecraft giving the Soviets a more advanced capability. Ground support equipment and flight hardware have also been furnished. Onboard computer hardware and software for spacecraft maneuver have been demonstrated as well -- an area in which the Soviets need help. US systems design practices in the integration and compatibility of spacecraft systems and networks have been shown to the Soviets during collaboration on design and manufacture of the docking mechanism. The Soviets are also being instructed by the US in antenna design, advanced telemetry, surface nets, and methods for electromagnetic shielding and interference avoidance; all are areas of space communications technology where the Soviets are comparatively weak. In spacecraft instrumentation, the Soviets are being instructed in the more advanced Apollo flight data displays and major spacecraft and subsystem parameters, particularly for attitude control and flight path maneuvers. Advanced US life support technology and EVA space suits are also being demonstrated for the Soviets. In the field of human engineering, the Soviets are being shown US techniques for compatible system design for man in contrast with the Soviet practice of man fitted to the machine. The far more advanced Apollo flight simulators and related equipment will tend to improve concepts and technology employed in Soviet flight training. Large numbers of Soviet ASTP personnel are being allowed to visit US space facilities for long periods of time and to have access to a wide range of activities not necessarily pertinent to ASTP alone. In contrast, US ASTP personnel have had extremely limited access to Soviet facilities and activities. The flow of technological information and hardware is heavily in favor of the Soviets.